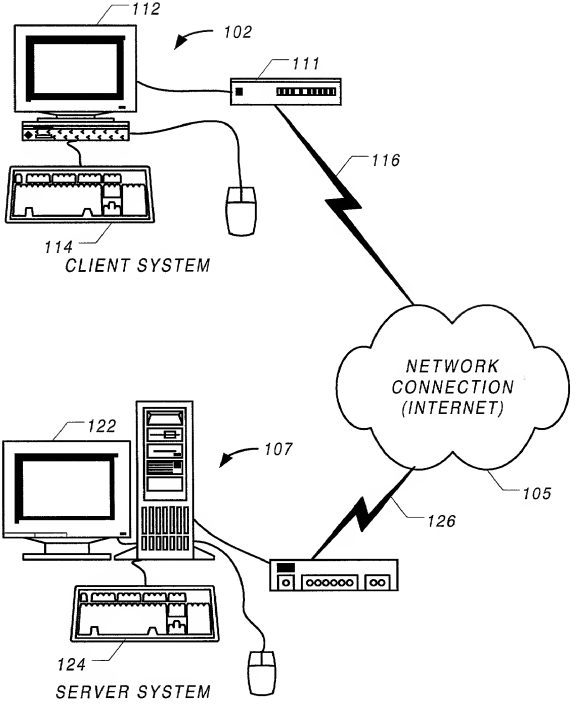
112
102
111
116
114
CLIENT SYSTEM
NETWORK
CONNECTION
(INTERNET)
122
107
105
126
124
SERVER SYSTEM

FIG. 1

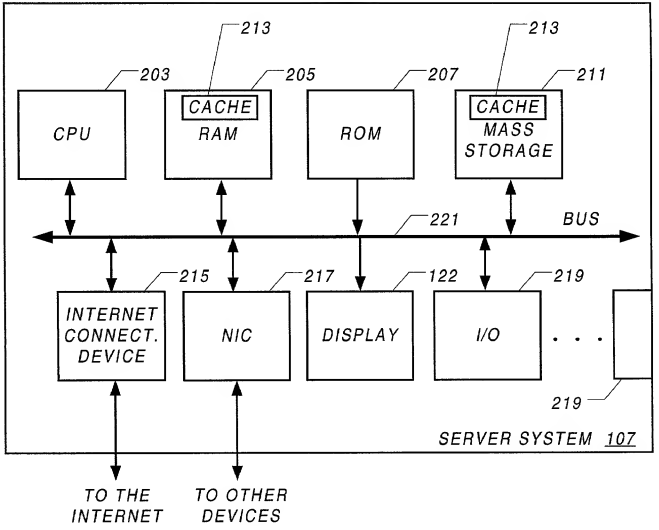
213
213
203
205
207
211
CPU
CACHE
RAM
ROM
CACHE
MASS
STORAGE
221
BUS
215
217
122
219
INTERNET
CONNECT.
DEVICE
NIC
DISPLAY
I/O
219
SERVER SYSTEM 107
TO THE
INTERNET
TO OTHER
DEVICES

FIG. 2

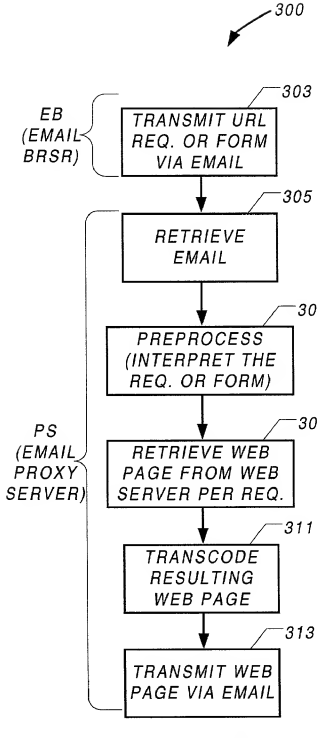
300
303
EB (EMAIL BRSR)
TRANSMIT URL REQ. OR FORM VIA EMAIL
305
RETRIEVE EMAIL
307
PREPROCESS (INTERPRET THE REQ. OR FORM)
309
PS (EMAIL PROXY SERVER)
RETRIEVE WEB PAGE FROM WEB SERVER PER REQ.
311
TRANSCODE RESULTING WEB PAGE
313
TRANSMIT WEB PAGE VIA EMAIL

FIG. 3A

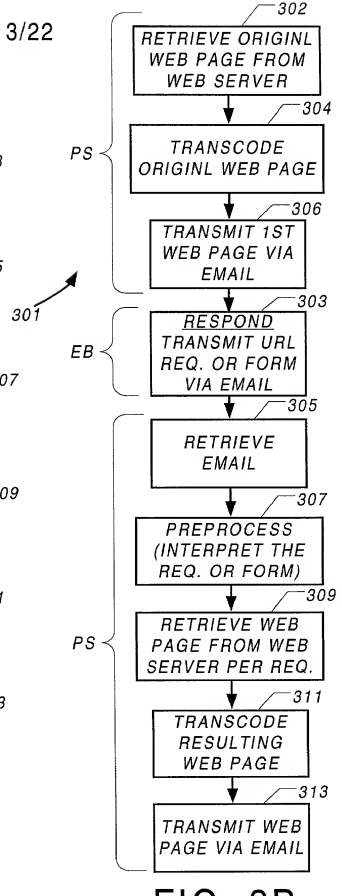
302
RETRIEVE ORIGINL WEB PAGE FROM WEB SERVER
304
PS
TRANSCODE ORIGINL WEB PAGE
306
TRANSMIT 1ST WEB PAGE VIA EMAIL
301
303
EB
RESPOND TRANSMIT URL REQ. OR FORM VIA EMAIL
305
RETRIEVE EMAIL
307
PREPROCESS (INTERPRET THE REQ. OR FORM)
309
PS
RETRIEVE WEB PAGE FROM WEB SERVER PER REQ.
311
TRANSCODE RESULTING WEB PAGE
313
TRANSMIT WEB PAGE VIA EMAIL

FIG. 3B

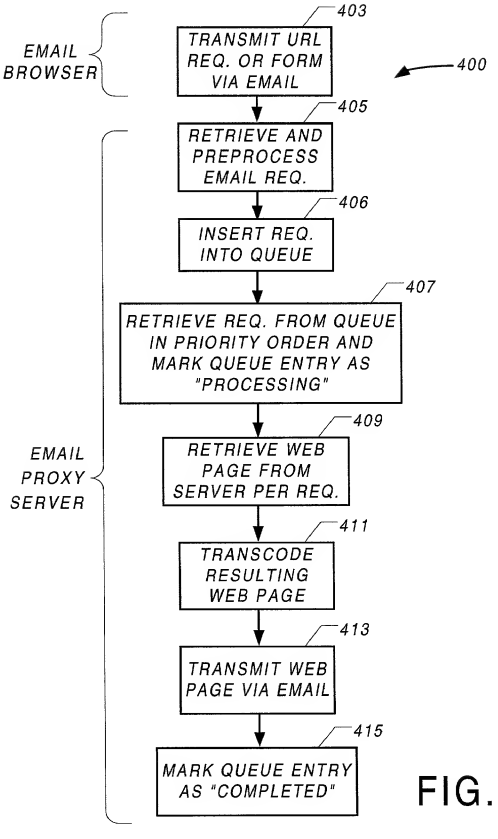

FIG. 4

Downloaded from PatentDocs.org

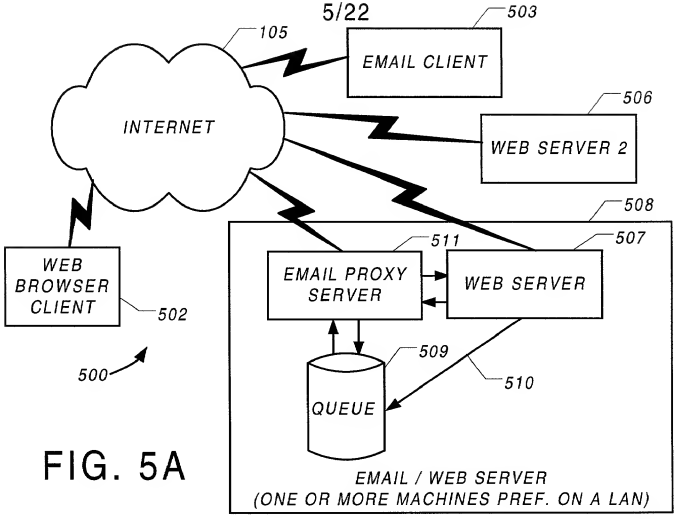
105
503
EMAIL CLIENT
INTERNET
506
WEB SERVER 2
508
511
507
EMAIL PROXY SERVER
WEB SERVER
WEB BROWSER CLIENT
502
509
510
QUEUE
500
EMAIL / WEB SERVER
(ONE OR MORE MACHINES PREF. ON A LAN)

FIG. 5A

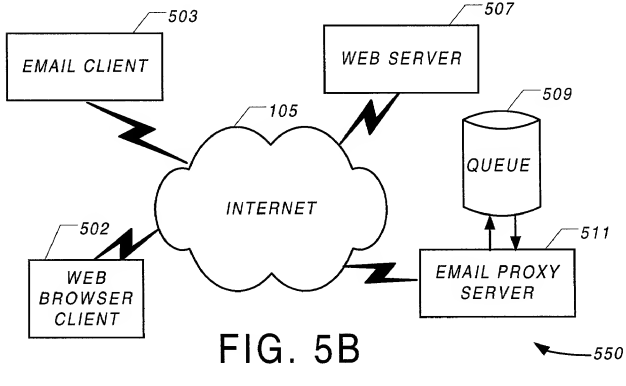
503
EMAIL CLIENT
507
WEB SERVER
509
105
QUEUE
INTERNET
502
511
WEB BROWSER CLIENT
EMAIL PROXY SERVER
550

FIG. 5B

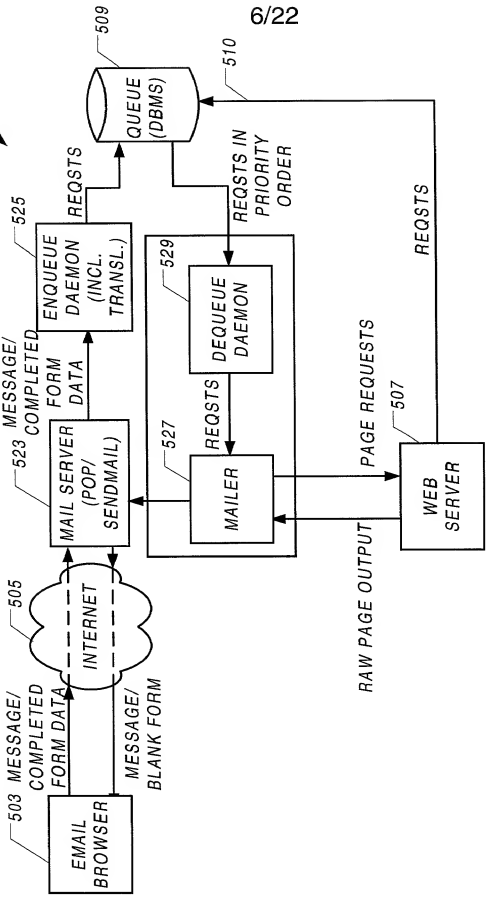
500
503 MESSAGE/ COMPLETED FORM DATA
EMAIL BROWSER
MESSAGE/ BLANK FORM
505
INTERNET
523
MAIL SERVER (POP/ SENDMAIL)
MESSAGE/ COMPLETED FORM DATA
525
ENQUEUE DAEMON (INCL. TRANSL.)
REQSTS
509
QUEUE (DBMS)
510
REQSTS IN PRIORITY ORDER
529
DEQUEUE DAEMON
REQSTS
527
MAILER
PAGE REQUESTS
507
WEB SERVER
REQSTS
RAW PAGE OUTPUT

FIG. 5C

Eudora Pro - [http://www.bigbow.com/menuform.html]]
File Edit Mailbox Message Transfer Special Tools Window Help
EUDORA
In
Out
Trash
Date: Tue, 08 Feb 2000 06:21:10 -0800
From: "David J. Jilk" <djilk@jilk.com>
Subject: http://www.bigbow.com/menuform.html
To: webmail@bigbow.com
Reply-to: djilk@jilk.com
X-Mailer: . . .
. . .
603
607
605
609
EMAIL TEXT WINDOW
600

FIG. 6

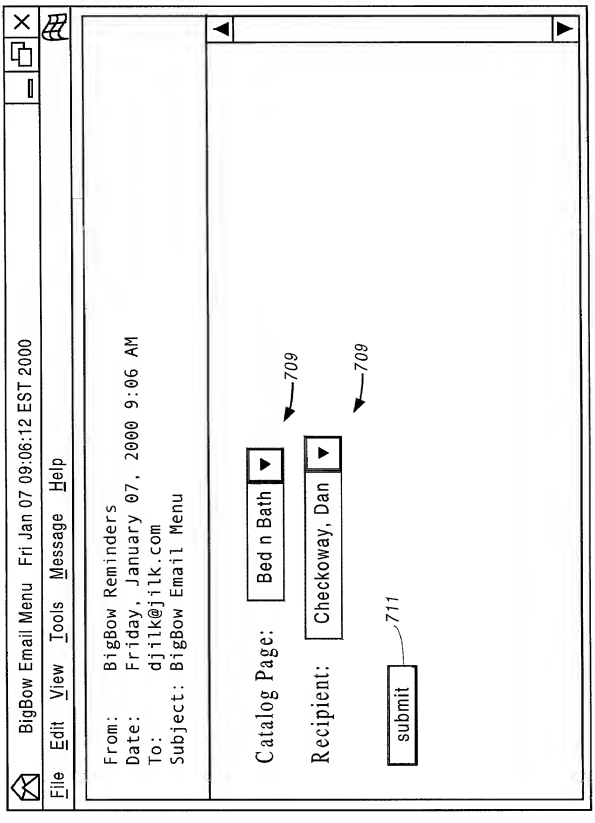
BigBow Email Menu Fri Jan 07 09:06:12 EST 2000
File Edit View Tools Message Help
From: BigBow Reminders
Date: Friday, January 07, 2000 9:06 AM
To: djilk@jilk.com
Subject: BigBow Email Menu
Catalog Page:
Bed n Bath
709
Recipient:
Checkoway, Dan
709
submit
711
EMAIL HTML DISPLAY WINDOW
700

FIG. 7A

```
<HTML>
<HEAD>
<META content=text/html;charset=iso-8859-1 http-equiv=Content-Type>
</HEAD>
<BODY>
<FORM action=mailto:webmail@bigbow.com method=POST>
<INPUT type=hidden name=REQUEST_URL
       value="http://www.bigbow.com/catalog.asp">
<INPUT type=hidden name=REQUEST_METHOD value=POST>
<P>Catalog Page:
<SELECT name=catalog>
<OPTION value=1>Bed n Bath</OPTION>
<OPTION value=2>Traditions</OPTION>
</SELECT>
<P>Recipient:
<SELECT name=recipient>
<OPTION value=1>Checkoway, Dan</OPTION>
<OPTION value=2>Hoffman, Jon</OPTION>
</SELECT>
<P><INPUT name=submit type=submit value=submit>
</FORM></BODY></HTML>
```

750

EMAIL HTML SOURCE

FIG. 7B

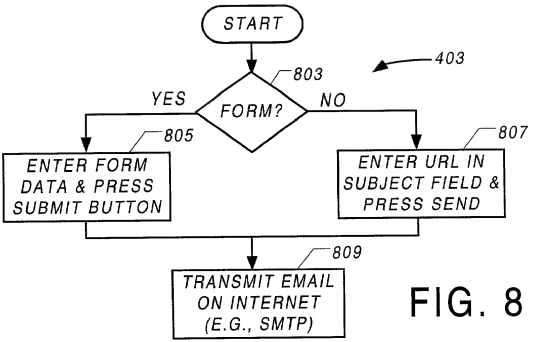
START
403
803
FORM?
YES
NO
805
ENTER FORM DATA & PRESS SUBMIT BUTTON
807
ENTER URL IN SUBJECT FIELD & PRESS SEND
809
TRANSMIT EMAIL ON INTERNET (E.G., SMTP)

FIG. 8

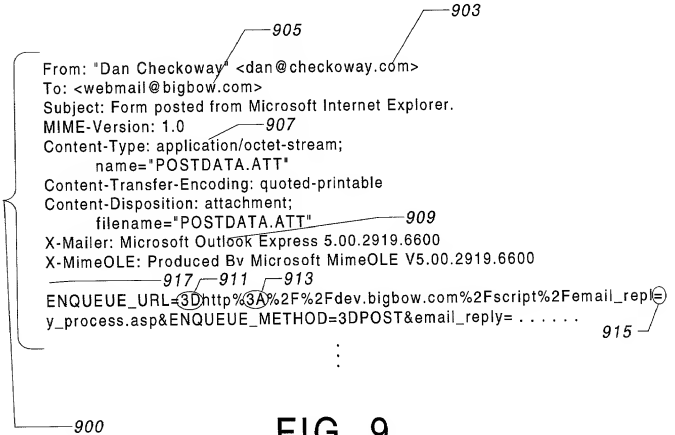
903
905
From: "Dan Checkoway" <dan@checkoway.com>
To: <webmail@bigbow.com>
Subject: Form posted from Microsoft Internet Explorer.
MIME-Version: 1.0
907
Content-Type: application/octet-stream;
name="POSTDATA.ATT"
Content-Transfer-Encoding: quoted-printable
Content-Disposition: attachment;
filename="POSTDATA.ATT"
909
X-Mailer: Microsoft Outlook Express 5.00.2919.6600
X-MimeOLE: Produced By Microsoft MimeOLE V5.00.2919.6600
917
911
913
ENQUEUE_URL=3Dhttp%3A%2F%2Fdev.bigbow.com%2Fscript%2Femail_repl=
y_process.asp&ENQUEUE_METHOD=3DPOST&email_reply= . . . . . .
915
900

FIG. 9

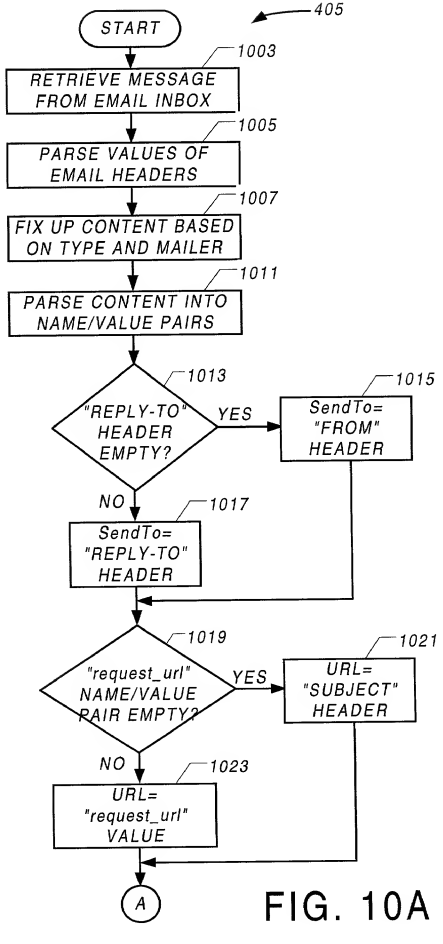
405
START
1003
RETRIEVE MESSAGE FROM EMAIL INBOX
1005
PARSE VALUES OF EMAIL HEADERS
1007
FIX UP CONTENT BASED ON TYPE AND MAILER
1011
PARSE CONTENT INTO NAME/VALUE PAIRS
1013
"REPLY-TO" HEADER EMPTY?
YES
1015
SendTo= "FROM" HEADER
NO
1017
SendTo= "REPLY-TO" HEADER
1019
"request_url" NAME/VALUE PAIR EMPTY?
YES
1021
URL= "SUBJECT" HEADER
NO
1023
URL= "request_url" VALUE
A

FIG. 10A

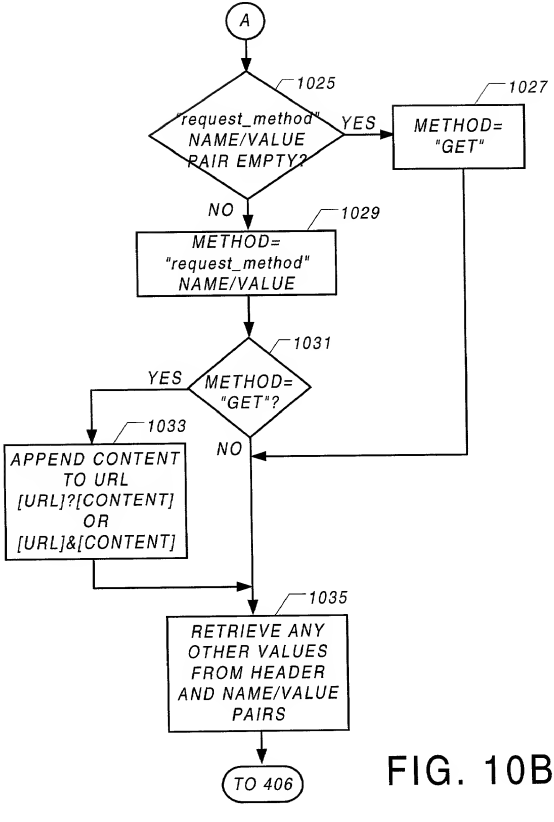
A
1025
"request_method" NAME/VALUE PAIR EMPTY?
YES
1027
METHOD= "GET"
NO
1029
METHOD= "request_method" NAME/VALUE
1031
METHOD= "GET"?
YES
NO
1033
APPEND CONTENT TO URL [URL]?[CONTENT] OR [URL]&[CONTENT]
1035
RETRIEVE ANY OTHER VALUES FROM HEADER AND NAME/VALUE PAIRS
TO 406

FIG. 10B

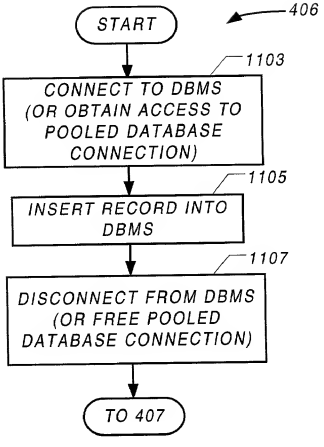
406
START
1103
CONNECT TO DBMS (OR OBTAIN ACCESS TO POOLED DATABASE CONNECTION)
1105
INSERT RECORD INTO DBMS
1107
DISCONNECT FROM DBMS (OR FREE POOLED DATABASE CONNECTION)
TO 407

FIG. 11

14/22

```
1200  INSERT INTO request_queue(
          request_id,        1203
          created_date,      1205
          completed_date,
          request_type_id,   1207
          request_status_id, 1209
          priority,          1211
          our_email,         1213
          sendto_email,      1215
          url,               1217
          request_method,    1219
          post_content)
      VALUES(NULL, '[CurrentDateTime]', NULL,
      'incoming', 'open', 1,
      'Webmail@bigbow.com', '[SendTo]',
      '[URL]', [Method], '[Content]')
```

FIG. 12

```
1400  SELECT * FROM request_queue WHERE
      request_status_id='open' AND
      completed_date is NULL ORDER BY
      priority, created_date
```

FIG. 14

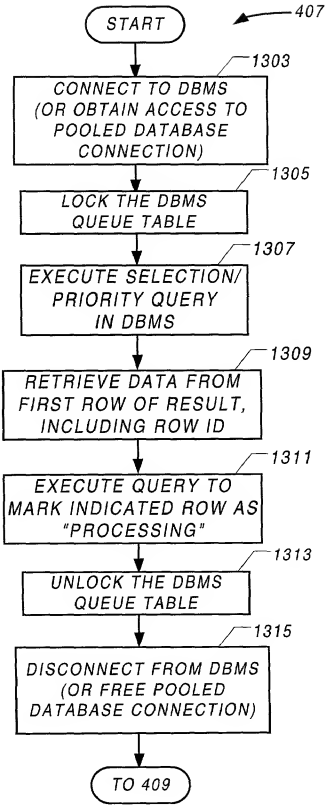
START
407
1303
CONNECT TO DBMS (OR OBTAIN ACCESS TO POOLED DATABASE CONNECTION)
1305
LOCK THE DBMS QUEUE TABLE
1307
EXECUTE SELECTION/ PRIORITY QUERY IN DBMS
1309
RETRIEVE DATA FROM FIRST ROW OF RESULT, INCLUDING ROW ID
1311
EXECUTE QUERY TO MARK INDICATED ROW AS "PROCESSING"
1313
UNLOCK THE DBMS QUEUE TABLE
1315
DISCONNECT FROM DBMS (OR FREE POOLED DATABASE CONNECTION)
TO 409

FIG. 13

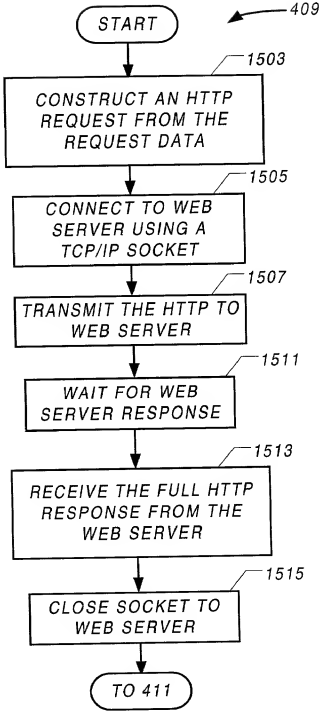
409
START
1503
CONSTRUCT AN HTTP REQUEST FROM THE REQUEST DATA
1505
CONNECT TO WEB SERVER USING A TCP/IP SOCKET
1507
TRANSMIT THE HTTP TO WEB SERVER
1511
WAIT FOR WEB SERVER RESPONSE
1513
RECEIVE THE FULL HTTP RESPONSE FROM THE WEB SERVER
1515
CLOSE SOCKET TO WEB SERVER
TO 411

FIG. 15

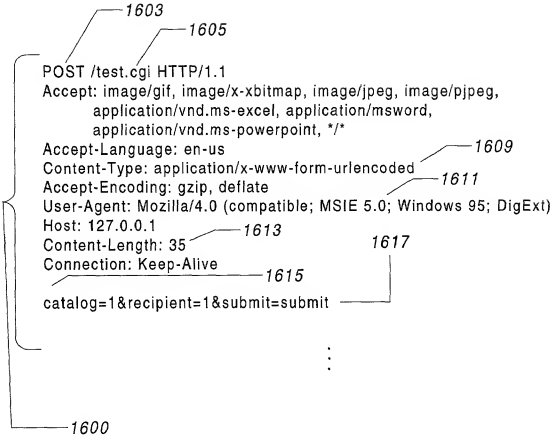
1603
1605
POST /test.cgi HTTP/1.1
Accept: image/gif, image/x-xbitmap, image/jpeg, image/pjpeg,
application/vnd.ms-excel, application/msword,
application/vnd.ms-powerpoint, */*
Accept-Language: en-us
1609
Content-Type: application/x-www-form-urlencoded
Accept-Encoding: gzip, deflate
1611
User-Agent: Mozilla/4.0 (compatible; MSIE 5.0; Windows 95; DigExt)
Host: 127.0.0.1
1613
Content-Length: 35
1617
Connection: Keep-Alive
1615
catalog=1&recipient=1&submit=submit
1600

FIG. 16

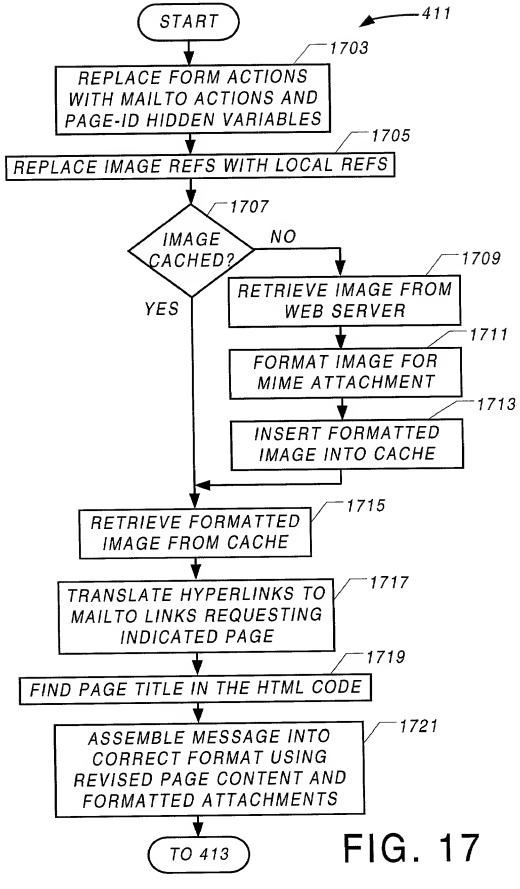
411
START
1703
REPLACE FORM ACTIONS WITH MAILTO ACTIONS AND PAGE-ID HIDDEN VARIABLES
1705
REPLACE IMAGE REFS WITH LOCAL REFS
1707
IMAGE CACHED?
NO
YES
1709
RETRIEVE IMAGE FROM WEB SERVER
1711
FORMAT IMAGE FOR MIME ATTACHMENT
1713
INSERT FORMATTED IMAGE INTO CACHE
1715
RETRIEVE FORMATTED IMAGE FROM CACHE
1717
TRANSLATE HYPERLINKS TO MAILTO LINKS REQUESTING INDICATED PAGE
1719
FIND PAGE TITLE IN THE HTML CODE
1721
ASSEMBLE MESSAGE INTO CORRECT FORMAT USING REVISED PAGE CONTENT AND FORMATTED ATTACHMENTS
TO 413

FIG. 17

1803
1805
1807
To: djilk@jilk.com
From: webmail@bigbow.com
Subject: BigBow
X-Courtesy-Of: BigBow Dequeue 1.0 (Built: Feb 13 2000 22:42:09)
1811
Mime-Version: 1.0
Content-Type: multipart/related; boundary="dequeue-boundary";
type=text/html
1809
This is a multi-part message in MIME format.
1813
1815
--dequeue-boundary
1817
Content-Type: text/html; charset=US-ASCII
Content-ID: <dequeue-body>
1819
BODY CODE 1821
<html><head><title>BigBow</title></head>
<body background="cid:http---www-bigbow-com-_borders-cap_top-jpg">
<a href="mailto:webmail@bigbow.com?subject=http://www.
bigbow.com/index.htm>
<img src="cid:http---www-bigbow-com-images-header-jpg">
<FORM ACTION="mailto:webmail@bigbow.com" METHOD="POST">
<INPUT TYPE="HIDDEN" NAME="REQUEST_URL"
VALUE="http://www.bigbow.com/subscribe">
<INPUT TYPE="HIDDEN" NAME="REQUEST_METHOD" VALUE="POST">
<input type="hidden" name="listid" value="443">
Email Address
<input TYPE="TEXT" SIZE="32" MAXLENGTH="255" NAME="ATTR1" VALUE>
</form></body></html>
1823
--dequeue-boundary
. . . . (Continued in FIG. 18B)
1800

FIG. 18A

1827
. . .(continuing from FIG. 18A last line " --dequeue-boundary")
Content-ID: <http---www-bigbow-com- borders-cap_top-jpg>
1825
Content-Type: image/jpeg
Content-Transfer-Encoding: BASE64
1829
R0lGODlheAAKALMAAA8PjRwckz8/pG5uup6e0czM5/b2+v///wAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAACwAAAAAeAAKAAAEVfDISau9OOvNu/9gKI5k+RWD
oK5s675wLM90XQ9FZgwB4P/AoHBILBqPyKTyFxgYKoSldEqtWouESfTK7Xq/
2UPvSy6bi4FD4cxum1HuuLw6mNvvyAgAOw==
ENCODED IMAGE DATA 1821
--dequeue-boundary
Content-ID: <http---www-bigbow-com-images-header-jpg>
Content-Type: image/jpeg
Content-Transfer-Encoding: BASE64
R0lGODlhJgIxAMQAAA8PixcXuBsbzmNjuQoKEJiY0ezs9vPz+dPT2Pn5/Ofn
6aWlpv////39/fn5+fPz8wAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAACwAAAAAJgIxAAAF/yAjjuQAnIAwrGzrvnAs
.
.
.
wWU7+9nQjnZ6sJmAWqx619jONq4OYFjOJMAABjhAAh7XgAOYe9y2Tre6183u
drv73fCON6ntLO962/ve+M63vvfN72jQudv9DrjAB07wghv84LcAOMIXzvCG
O/zhEI+4xCdO8Ypb/OIYz7jGN87xjnv84yAPuchHTvKSm/zkKE85LKqt8pa7
/OUwj7nMZ07zmjckBAA7
1833
--dequeue-boundary--
1800 (CONTD.)

FIG. 18B

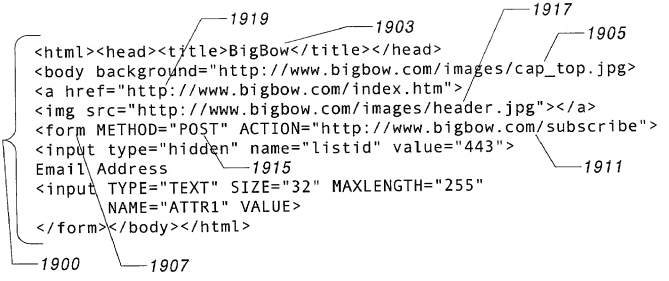

FIG. 19A

FIG. 19B

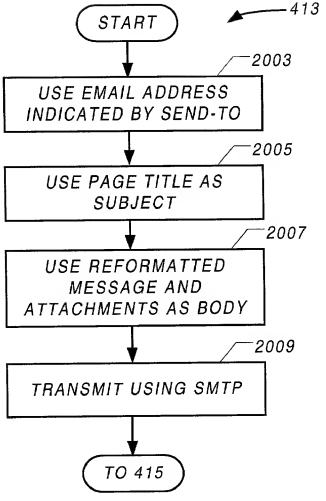
START
413
2003
USE EMAIL ADDRESS INDICATED BY SEND-TO
2005
USE PAGE TITLE AS SUBJECT
2007
USE REFORMATTED MESSAGE AND ATTACHMENTS AS BODY
2009
TRANSMIT USING SMTP
TO 415

FIG. 20

Our Ref./Docket No: BIGBOW-001-1 Pate

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Jilk, Jr., *et al.*	Group Art Unit: unassigned
Title: SYSTEM, METHOD, APPARATUS AND COMPUTER PROGRAM PRODUCT FOR OPERATING A WEB SITE BY ELECTRONIC MAIL	Examiner: unassigned

LETTER TO OFFICIAL DRAFTSPERSON SUBMISSION OF FORMAL DRAWINGS

The Commissioner for Patents
Washington, DC 20231
ATTN: Official Draftsperson

Dear Sir or Madam:

Attached please find 22 sheets of formal drawings to be made of record for the above identified patent application submitted herewith.

Respectfully Submitted,

Feb 9, 2001
Date

Dov Rosenfeld, Reg. No. 38687

Address for correspondence and attorney for applicant(s):
Dov Rosenfeld, Reg. No. 38,687
5507 College Avenue, Suite 2
Oakland, CA 94618
Telephone: (510) 547-3378; Fax: (510) 653-7992

Certificate of Mailing under 37 CFR 1.10

I hereby certify that this application and all attachments are being deposited with the United States Postal Service as Express Mail (Express Mail Label: EL752476236US in an envelope addressed to Box Patent Application, Commissioner for Patents, Washington, D.C. 20231 on

Date: Feb 9, 2001

Signed:

Name: Dov Rosenfeld, Reg. No. 38687